

AIRSKIN[®] Modules

Fact Sheet



AIRSKIN® Modules

Flat Modules

200x100-H0	[BLASMOD200X100H0]	PAGE 3
200x100-H1	[BLASMOD200X100H1]	PAGE 5
200x200-H0	[BLASMOD200X200H0]	PAGE 7
200x200-H1	[BLASMOD200X200H1]	PAGE 9
300x200-H0	[BLASMOD300X200H0]	PAGE 11
300x200-H1	[BLASMOD300X200H1]	PAGE 13
400x200-H0	[BLASMOD400X200H0]	PAGE 15
400x200-H1	[BLASMOD400X200H1]	PAGE 17

Edge Modules

200x160x100E-H0	[BLASMOD200X160X100EH0]	PAGE 19
200x260x100E-H0	[BLASMOD200X260X100EH0]	PAGE 21
400x200x100E-H0	[BLASMOD400X200X100EH0]	PAGE 23

General Information

Installation and Cabling	PAGE 25
Actuation Characteristics (Sensitivity & Dampening)	PAGE 27

AIRSKIN® Module 200x100-H0 [BLASMOD200X100H0]

Product Description

AIRSKIN® Module 200x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 160 g

Weight including Packaging: 250 g

Package size: 105x220x65 mm

Consists of

1 AIRSKIN® Pad 200x100

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

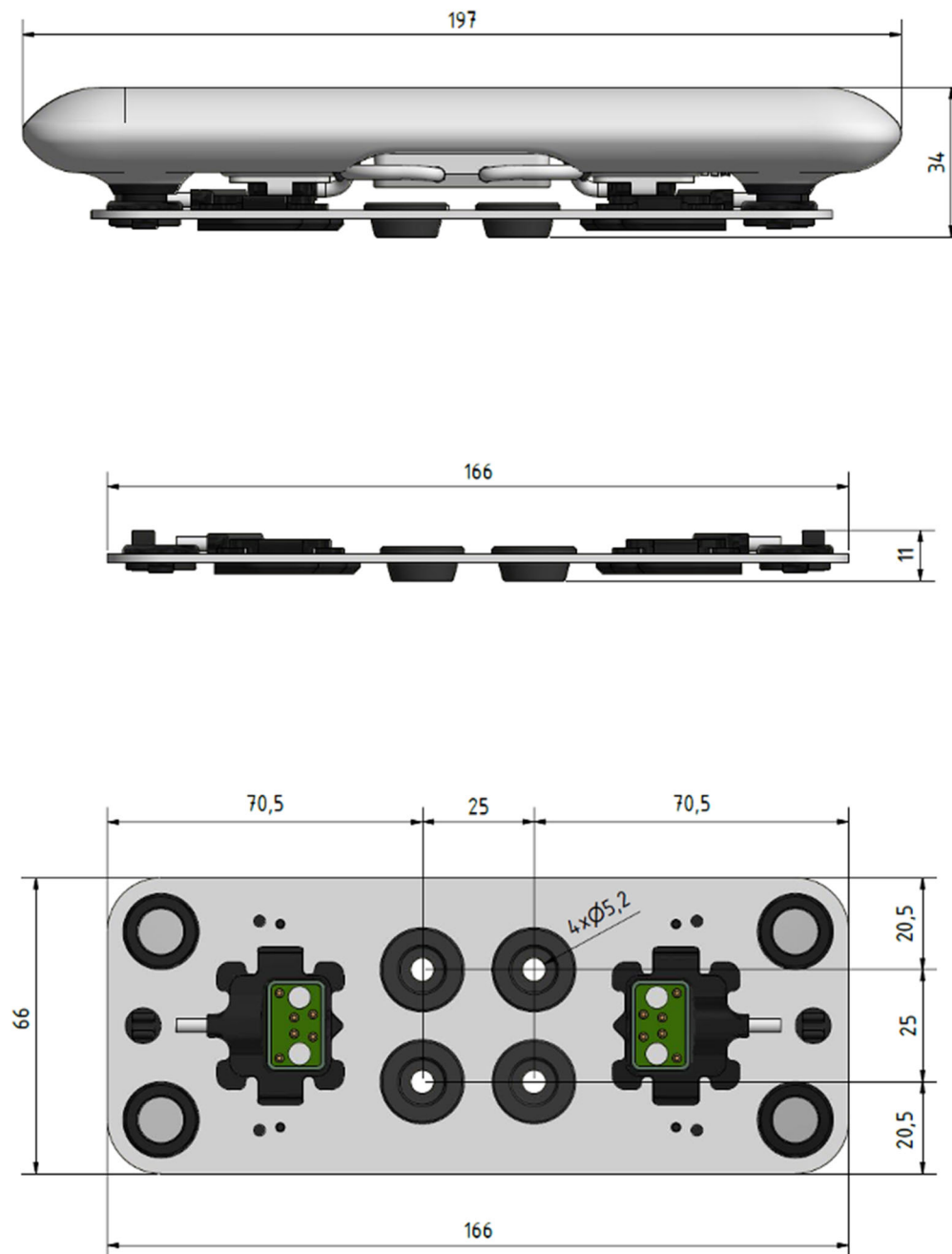
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 200x100-H0 [BLASMOD200X100H0]

Product Detail



AIRSKIN® Module 200x100-H1 [BLASMOD200X100H1]

Product Description

AIRSKIN® Module 200x100-H1 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 52 mm and compressibility is a maximum of 30 mm.

Weight of Product: 180 g

Weight including Packaging: 270 g

Package size: 105x220x65 mm

Consists of

1 AIRSKIN® Pad 200x100

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H1

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

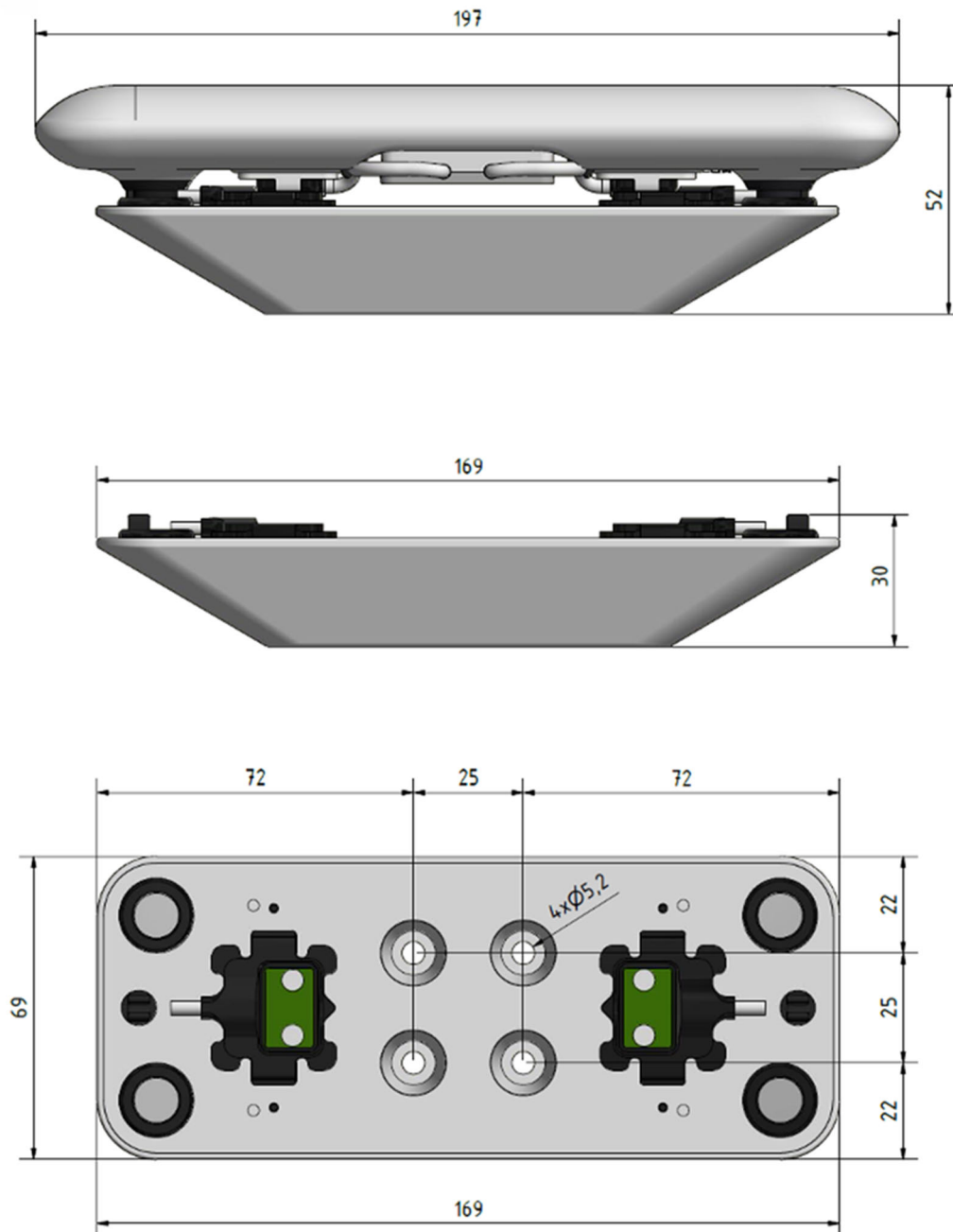
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 200x100-H1 [BLASMOD200X100H1]

Product Detail



AIRSKIN® Module 200x200-H0 [BLASMOD200X200H0]

Product description

AIRSKIN® Module 200x200-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 240 g

Weight including Packaging: 340 g

Package size: 210x220x65 mm

Consists of

1 AIRSKIN® Pad 200x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

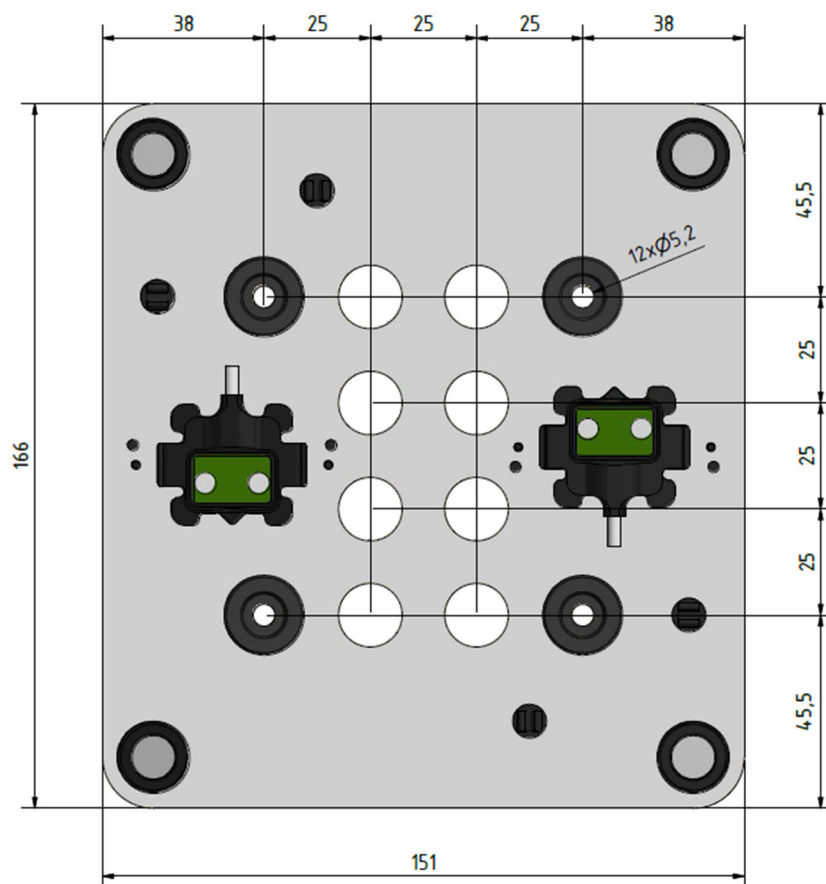
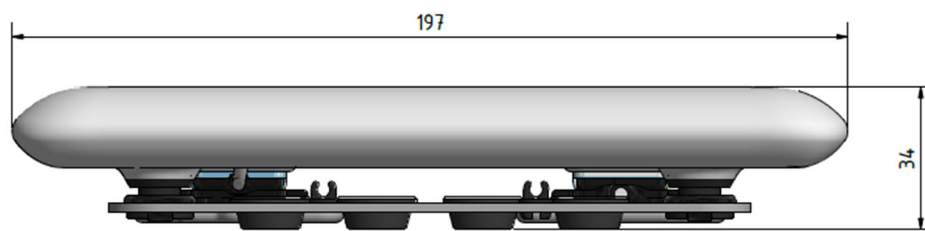
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 200x200-H0 [BLASMOD200X200H0]

Product detail



AIRSKIN® Module 200x200-H1 [BLASMOD200X200H1]

Product Description

AIRSKIN® Module 200x200-H1 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 52 mm and compressibility is a maximum of 30 mm.

Weight of Product: 280 g

Weight including Packaging: 380 g

Package size: 210x220x65 mm

Consists of

1 AIRSKIN® Pad 200x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H1

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

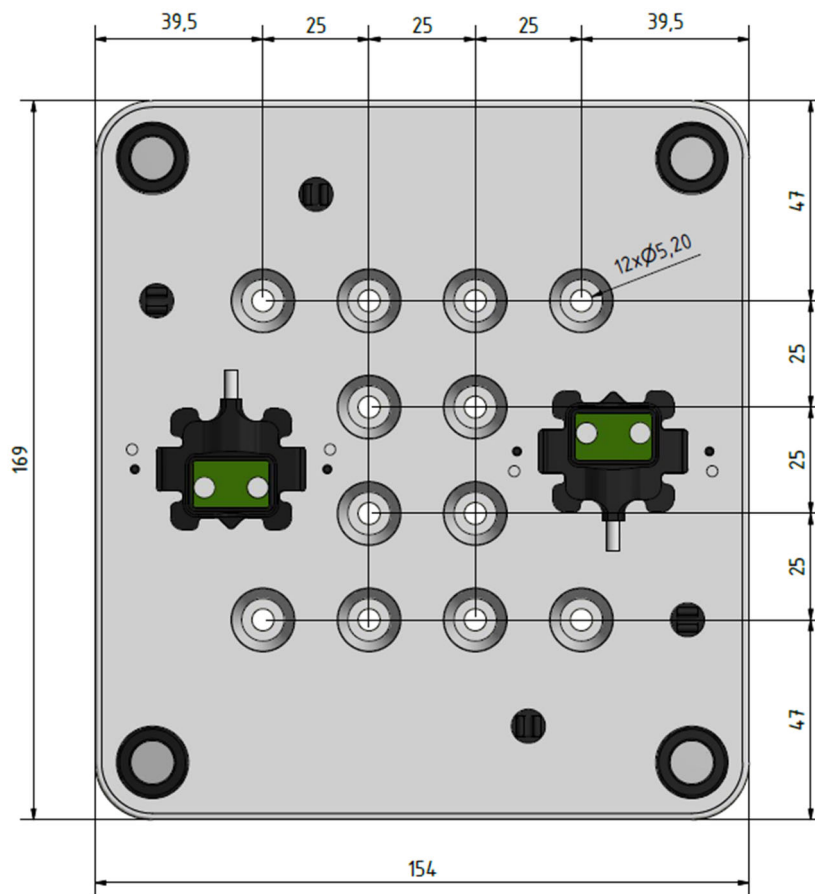
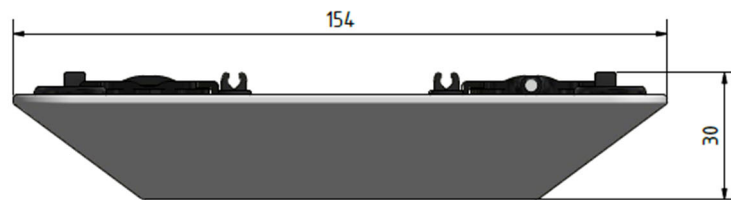
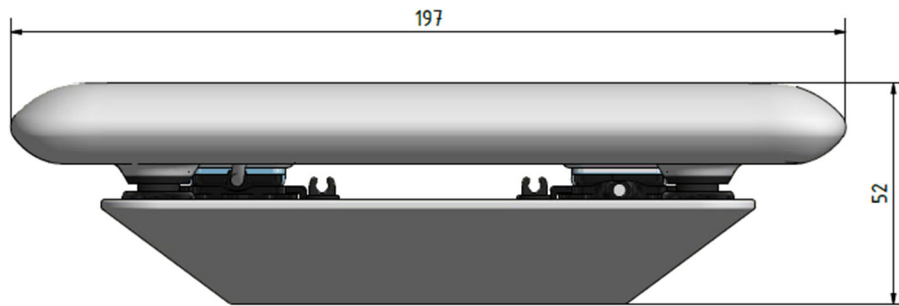
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 200x200-H1 [BLASMOD200X200H1]

Product Detail



AIRSKIN® Module 300x200-H0 [BLASMOD300X200H0]

Product description

AIRSKIN® Module 300x200-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 300 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 340 g

Weight including Packaging: 460 g

Package size: 315x220x65 mm



Consists of

1 AIRSKIN® Pad 300x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

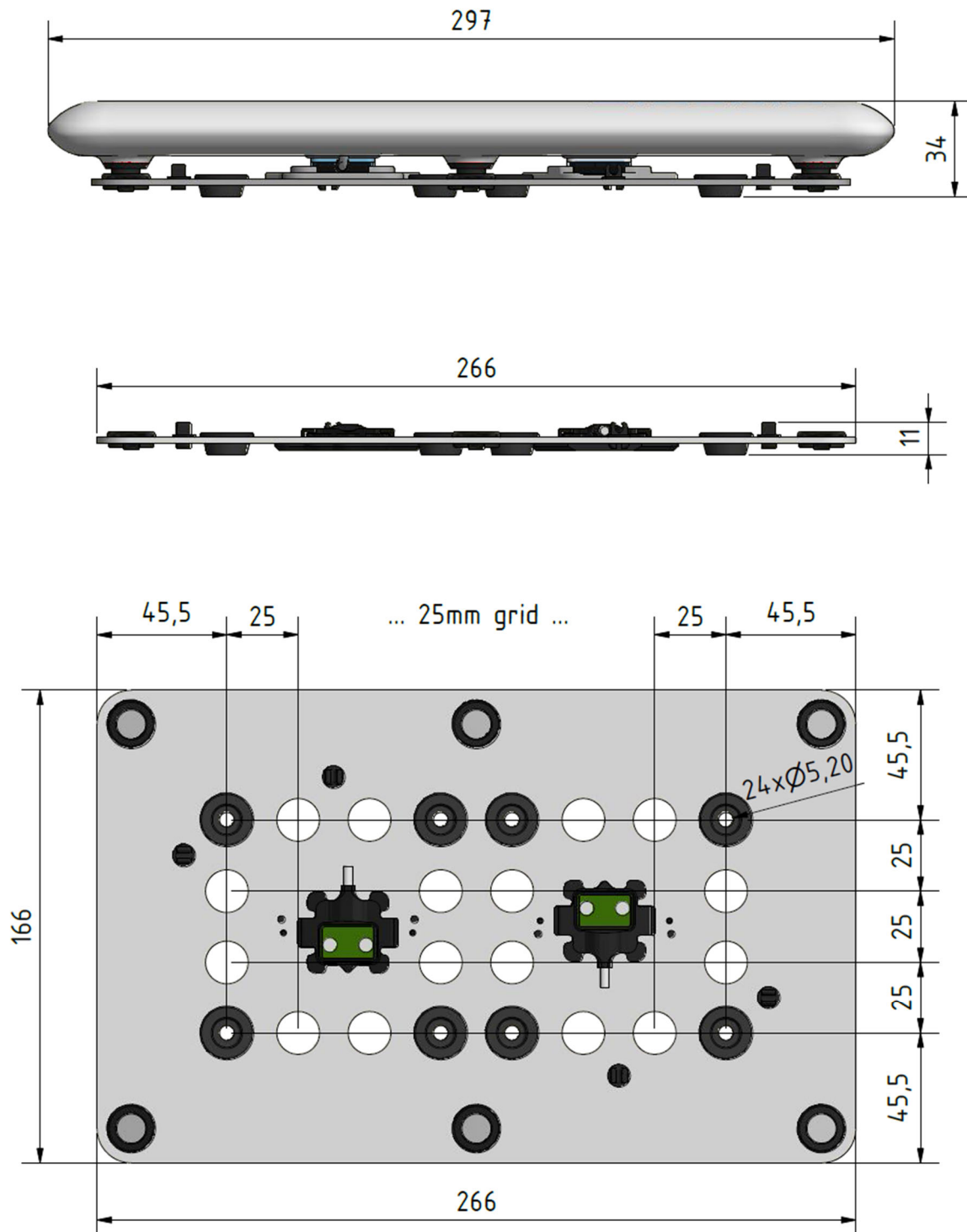
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 300x200-H0 [BLASMOD300X200H0]

Product Detail



AIRSKIN® Module 300x200-H1 [BLASMOD300X200H1]

Product description

AIRSKIN® Module 300x200-H1 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 300 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 52 mm and compressibility is a maximum of 30 mm.

Weight of Product: 430 g

Weight including Packaging: 550 g

Package size: 315x220x65 mm

Consists of

1 AIRSKIN® Pad 300x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H1

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

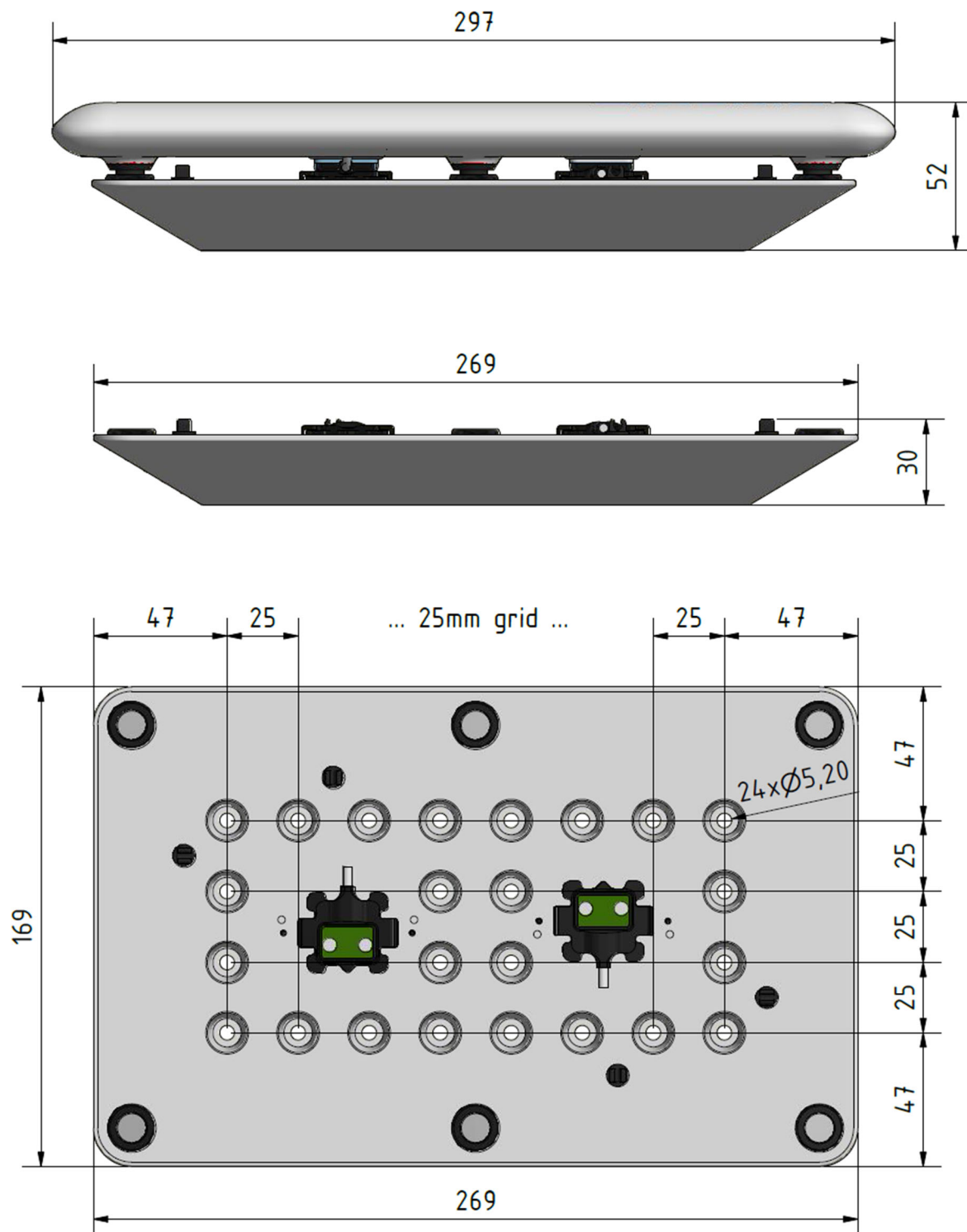
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 300x200-H1 [BLASMOD300X200H1]

Product detail



AIRSKIN® Module 400x200-H0 [BLASMOD400X200H0]

Product Description

AIRSKIN® Module 300x200-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 400 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 430g

Weight including Packaging: 570g

Package size: 420x220x65mm

Consists of

1 AIRSKIN® Pad 400x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

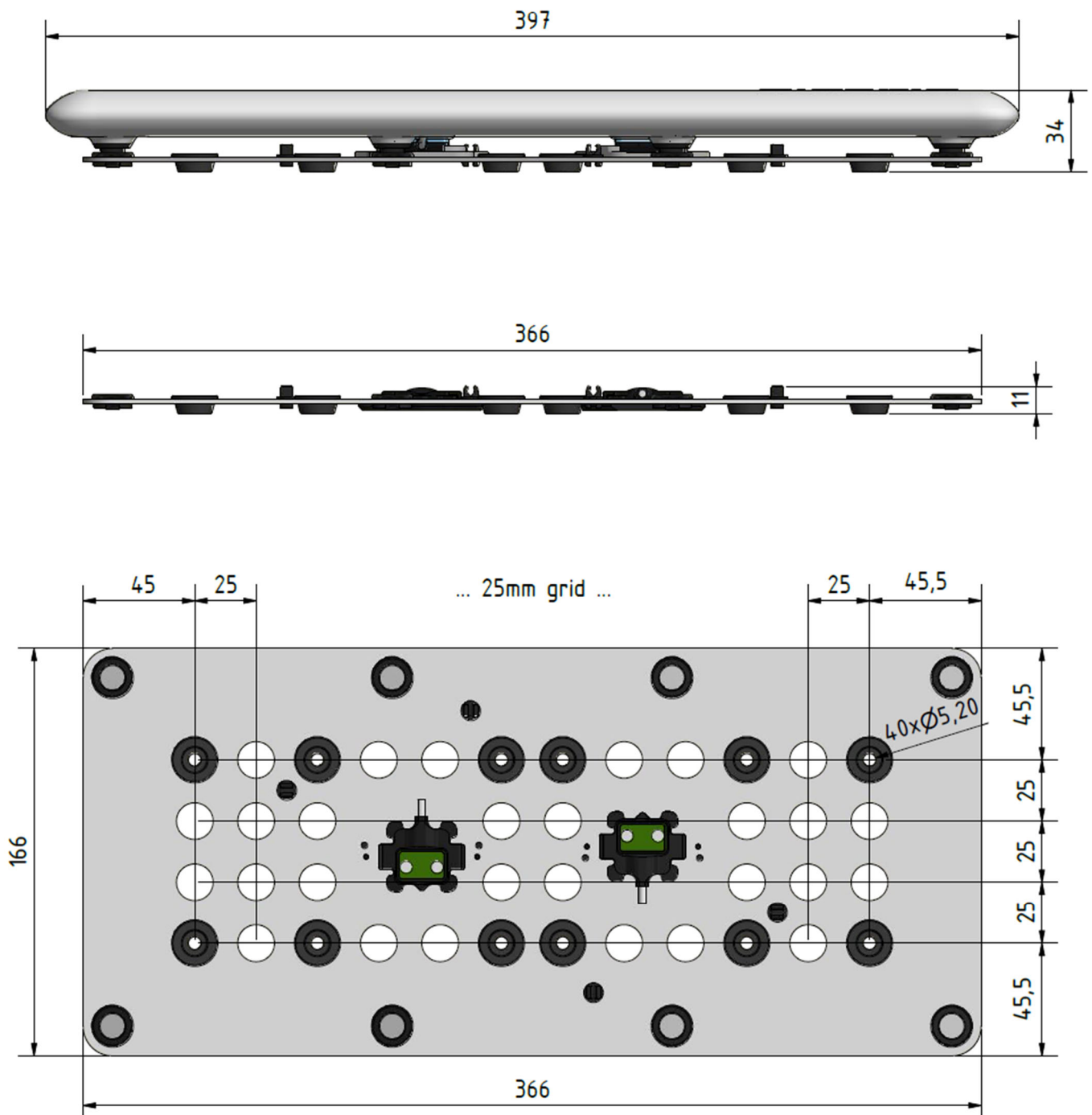
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 400x200-H0 [BLASMOD400X200H0]

Product Detail



AIRSKIN® Module 400x200-H1 [BLASMOD400X200H1]

Product description

AIRSKIN® Module 400x200-H1 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 400 by 200 mm and a mounting structure with magnetic connectors. The total installed thickness is 52 mm and compressibility is a maximum of 30 mm.

Weight of Product: 560 g

Weight including Packaging: 700 g

Package size: 420x220x65 mm

Consists of

1 AIRSKIN® Pad 00x200

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H1

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

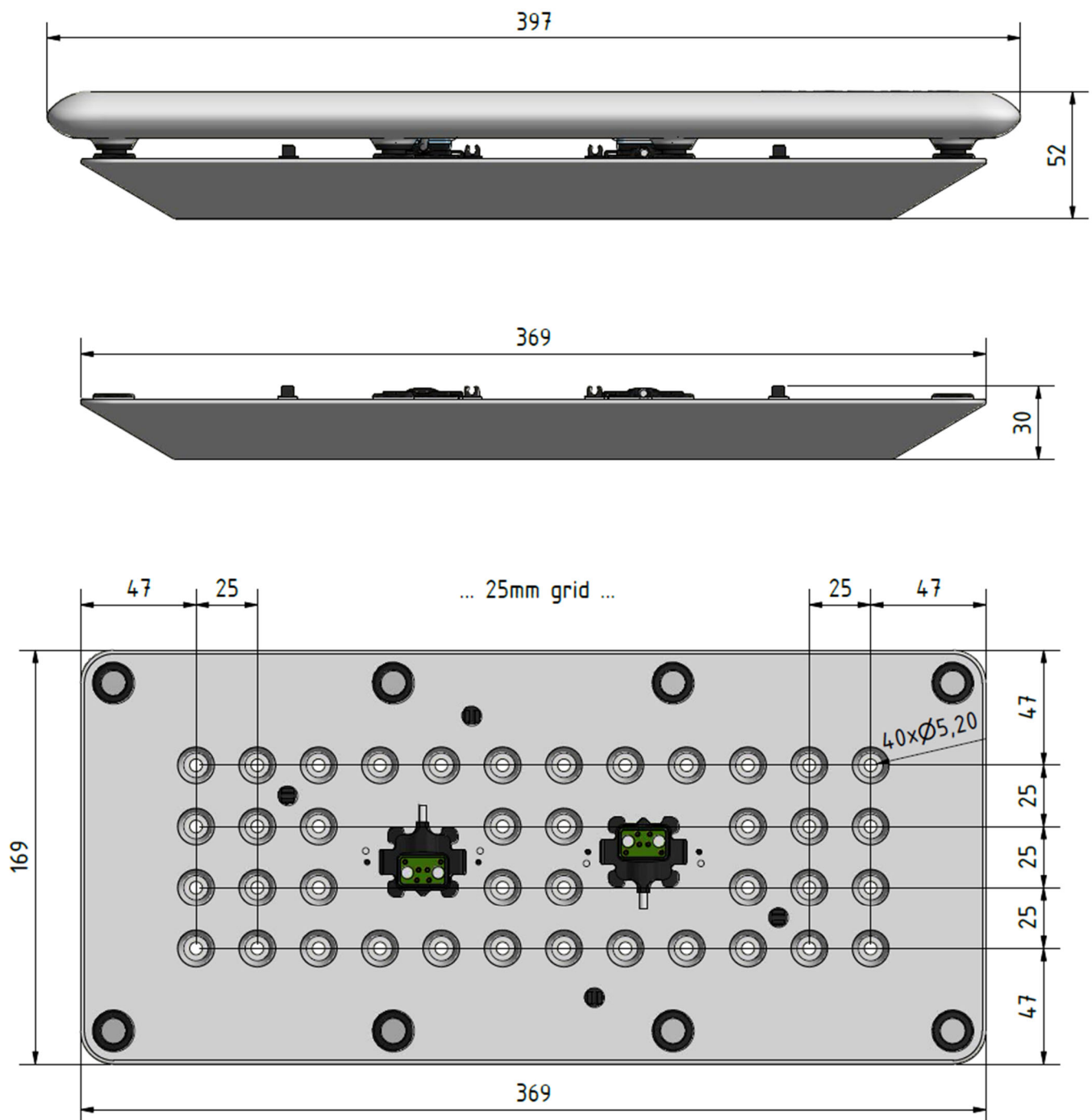
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 400x200-H1 [BLASMOD400X200H1]

Product Detail



AIRSKIN® Module 200x160x100E-H0 [BLASMOD200X160X100EH0]

Product description

AIRSKIN® Module 200x160x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 160 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 300 g

Weight including Packaging: 420 g

Package size: 210x220x130 mm

Consists of

1 AIRSKIN® Pad 200x160x100

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

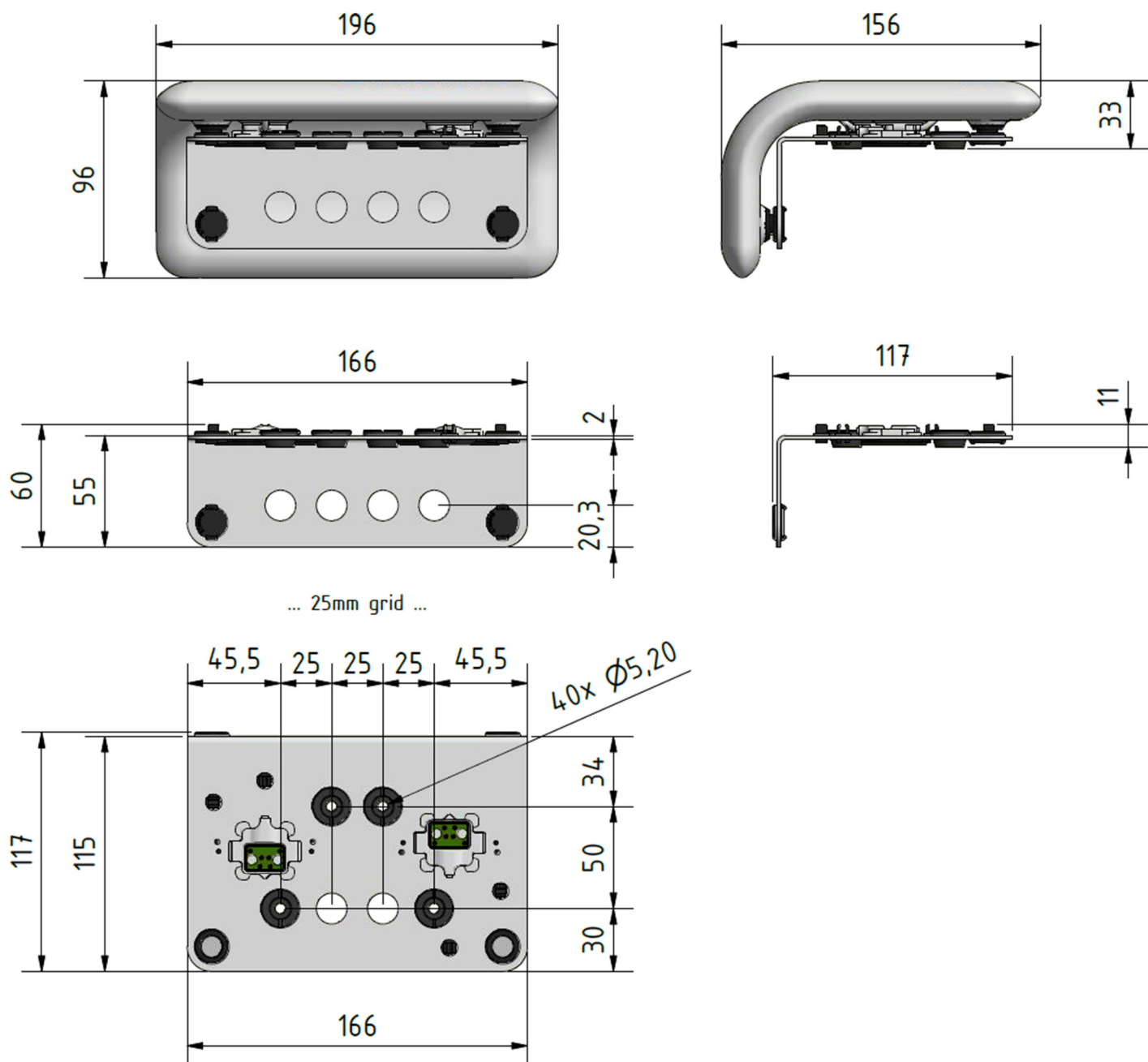
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 200x160x100E-H0 [BLASMOD200X160X100EH0]

Product Detail



AIRSKIN® Module 200x260x100E-H0 [BLASMOD200X260X100EH0]

Product description

AIRSKIN® Module 200x260x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 200 by 260 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 400 g

Weight including Packaging: 540 g

Package size: 315x220x130 mm

Consists of

1 AIRSKIN® Pad 200x260x100

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

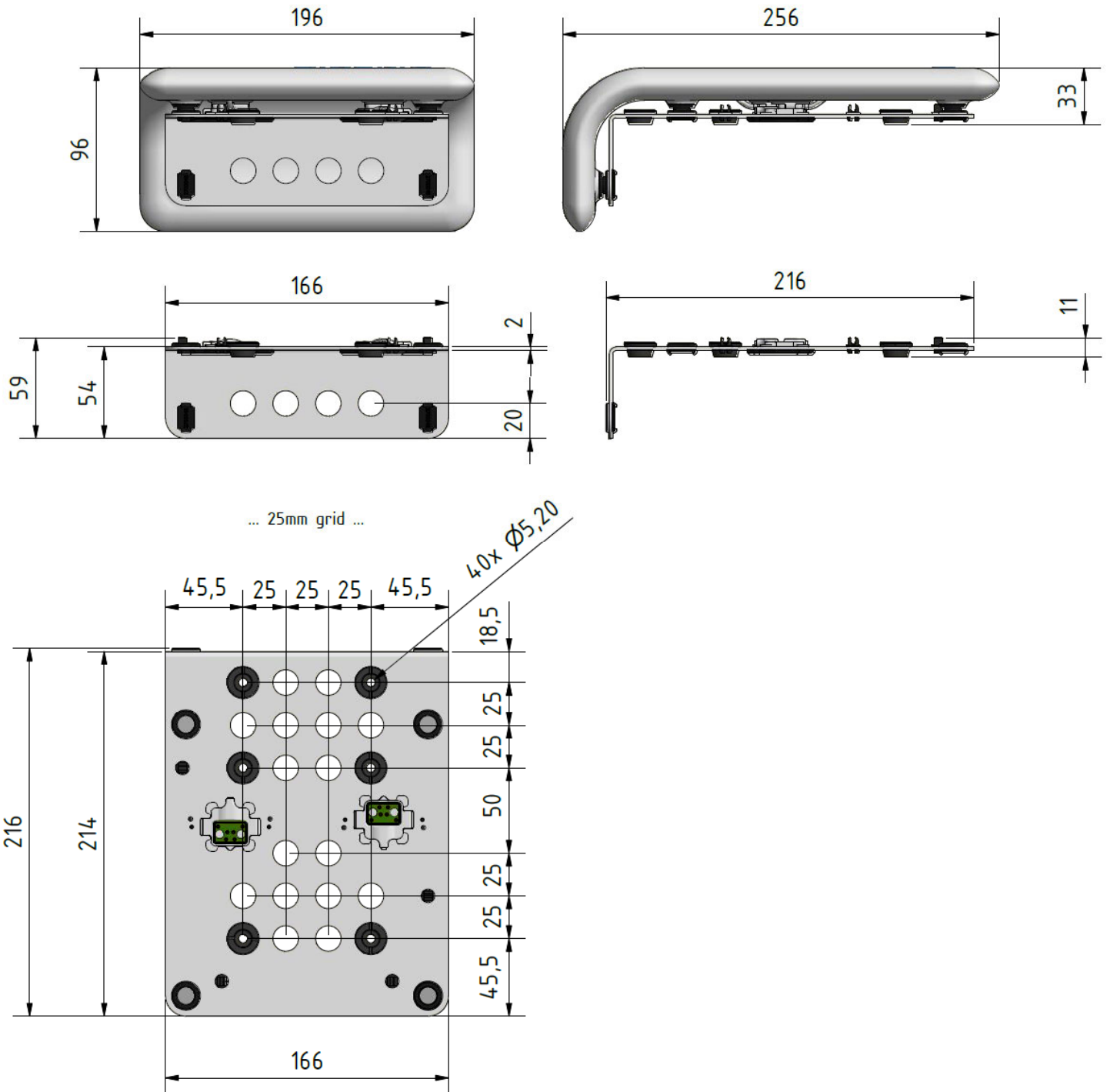
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 200x260x100E-H0 [BLASMOD200X260X100EH0]

Product Detail



AIRSKIN® Module 400x200x100E-H0 [BLASMOD400X200X100EH0]

Product Description

AIRSKIN® Module 400x200x100-H0 is a pressure sensitive safety sensor. It consists of a soft AIRSKIN® pad with a size of 400 by 200 by 100 mm and a mounting structure with magnetic connectors. The total installed thickness is 34 mm and compressibility is a maximum of 16 mm.

Weight of Product: 645 g

Weight including Packaging: 805 g

Package size: 420x220x130 mm

Consists of

1 AIRSKIN® Pad 400x200x100

White industrial polyurethane, certified safety electronics, magnetic connectors

1 Mounting Structure H0

ABS structure with magnetic connectors for AIRSKIN® Pad and mounting points

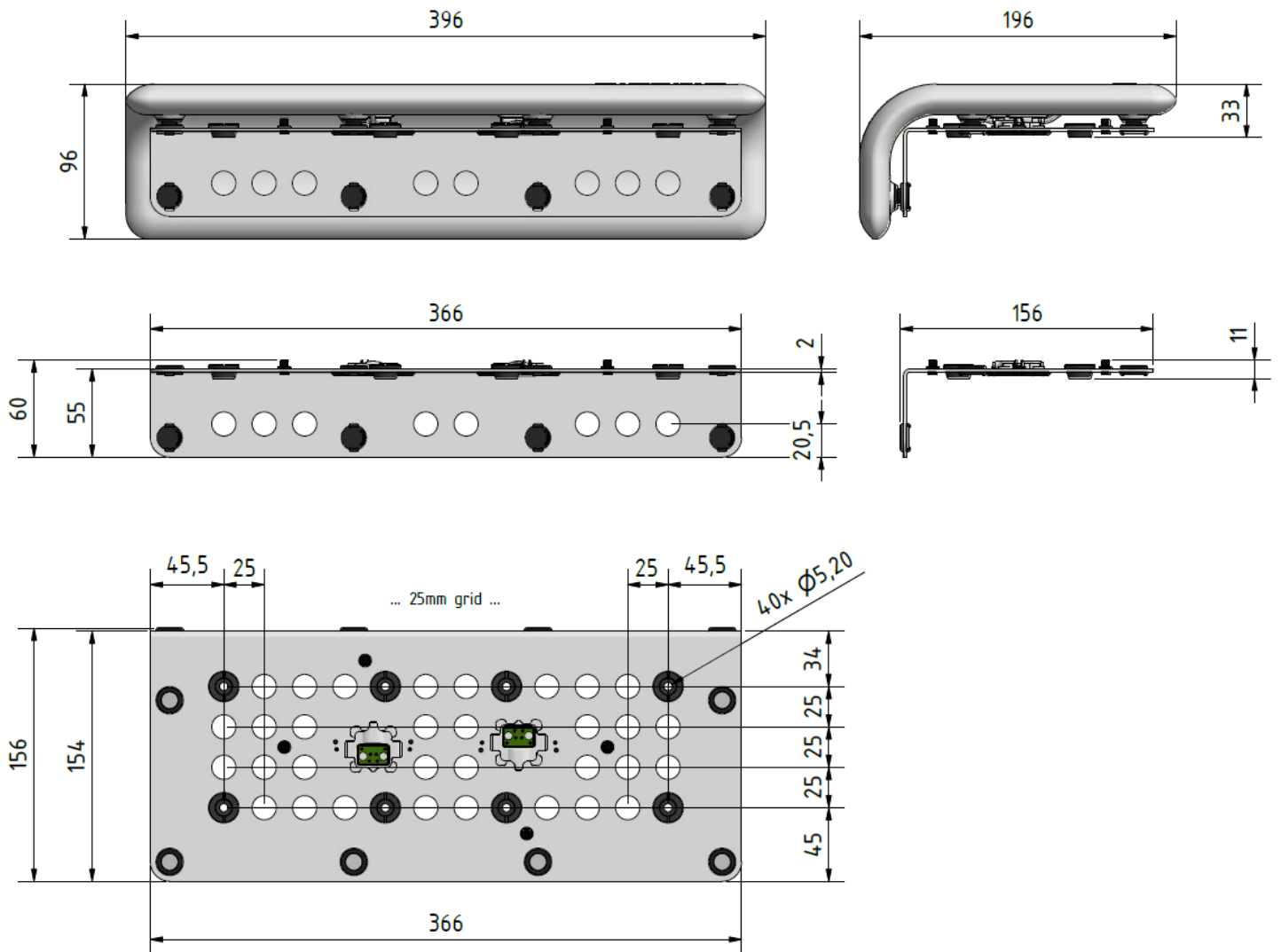
1 Cable, 400 mm

Cable with integrated magnetic connectors on both ends to connect to next AIRSKIN® Module



AIRSKIN® Module 400x200x100E-H0 [BLASMOD400X200X100EH0]

Product Detail



AIRSKIN® Modules

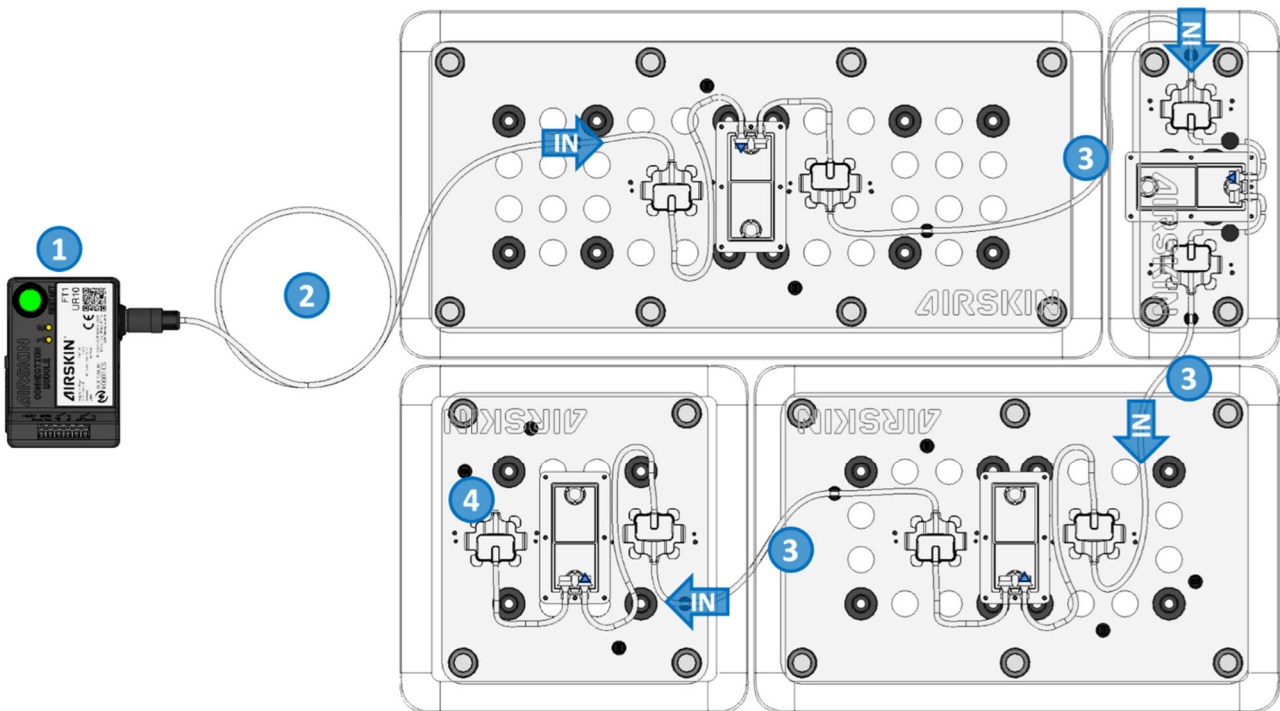
Installation and Cabling

Operation of AIRSKIN® Modules requires:

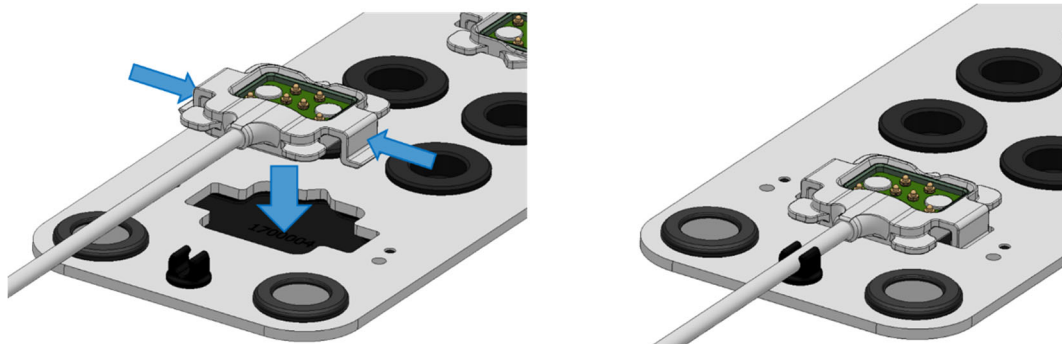
AIRSKIN® connection box **1** with connection cable **2**

Up to 15 AIRSKIN® Modules in series with cables **3**

Terminator **4**



Mounting of magnetic connectors:



AIRSKIN® Modules

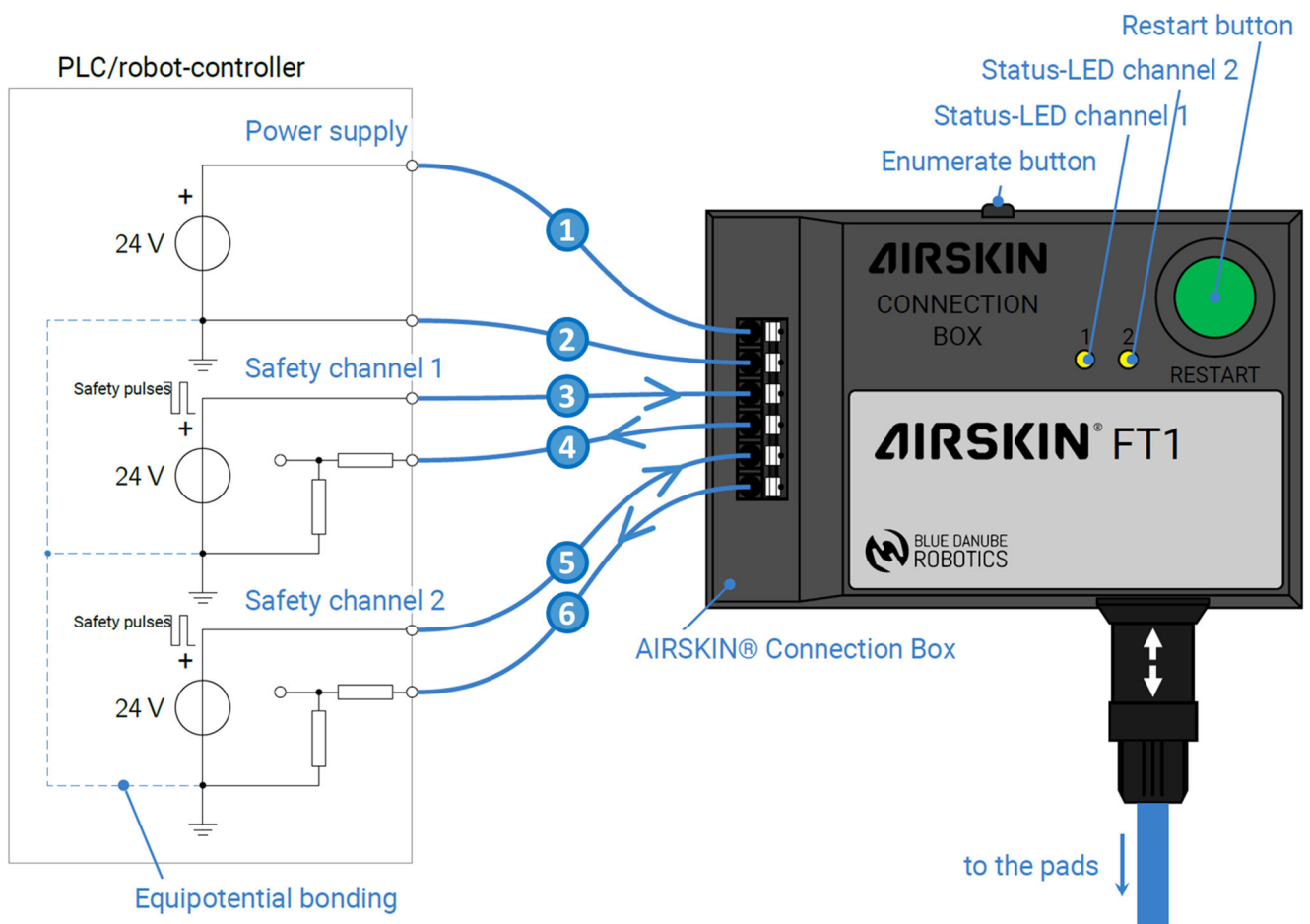
Installation and Cabling

Note

- Please read the AIRSKIN® manual
- Electrical connection to robot controller via AIRSKIN® Connection Box
- Input voltage **1** + 24V DC
- Current consumption $\leq 0.8A$
- **Not potential-free!** When using an external power supply, grounds of power supply and **2** robot controller must be connected!

Safety Channels

- Inputs **3** und **4** + 24 V DC (test pulses allowed)
- Outputs **5** und **6** + 24 V DC (no collision - safety channels closed) or 0 V DC (collision or error - safety channels open)



AIRSKIN® Modules

Actuation Characteristics

Equipment

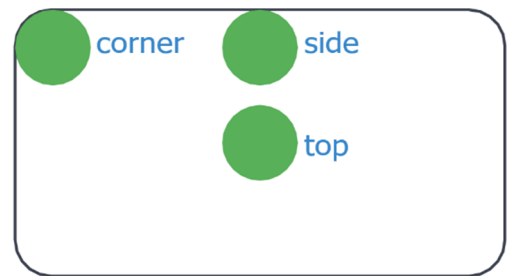
Robotiq FT 300 Force Torque Sensor on a lightweight robot arm

Contact area: Cylinder with diameter 30 mm

Measurement

The tip of the cylinder is moving towards the pad with 20 mm/s. When the AIRSKIN® module pad is activated, the resulting force is measured by the FT 300 sensor. The distance travelled by the tip after touching the AIRSKIN® surface is taken via the robot controller. Values are averaged over 5 measurements.

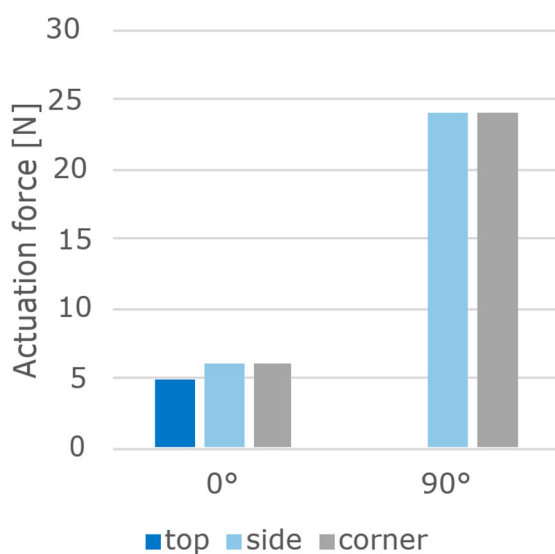
Top view



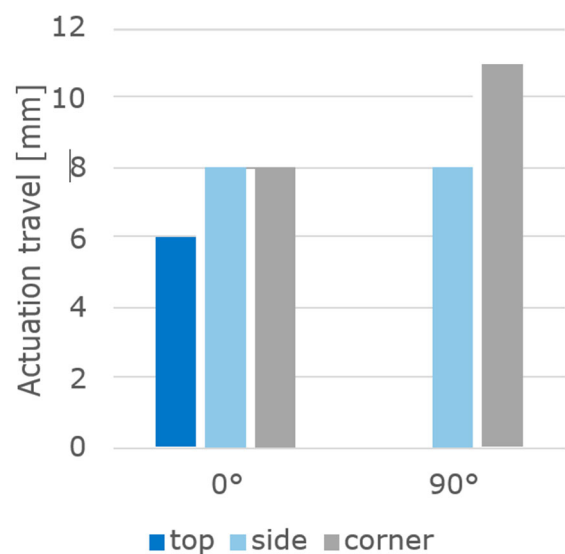
Side view



AIRSKIN® Modules H0
Actuation: Force



AIRSKIN® Modules H0
Actuation: Travel





A BLUE DANUBE ROBOTICS PRODUCT

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Linkedin

[linkedin.com/company/airskin-by-blue-danube-robotics/](https://www.linkedin.com/company/airskin-by-blue-danube-robotics/)

For more information

CAD Data, KUKA Sim files and Datasheets can
be downloaded from:

<https://www.airskin.io/downloadkit>